REMARKS

Reconsideration and allowance of the above-referenced application are respectfully requested. Claim 4 is amended. Claims 1-11 are pending in the application.

The specification has been amended to correct an informality. A marked-up version of the amendments is attached, where insertions are underlined and deletions are bracketed.

Claims 1-11 stand rejected under 35 USC §102(e) in view of U.S. Patent No. 6,430,188 to Kadambi et al. This rejection is respectfully traversed. The following is a comparison between the independent claims and the applied reference.

Independent claims 1 and 9 each specify an arrangement where an integrated network switch is configured for learning network addresses of received data packets. Each of the independent claims 1 and 9 specify that learning is disabled for an identified one of the network switch ports the transfer data packets between the integrated network switch and a router.

Claim 1 specifies "identifying one of the network switch ports that transfer data packets between the integrated network switch and a router; and disabling learning by the switching module of network addresses for the data packets transferred by the identified one network switch port."

Claim 9 specifies "a host controller configured for disabling learning of the layer 2 and layer 3 network addresses of any of the data packets transferred by the one network switch port, based on determining that the one network switch port transfers the data packets between the integrated network switch and the router."

Hence, disabling of learning for the network switch port configured for transferring packets between the switch and the router ensures that the router cannot overwhelm the address table with the network switch. These and other features another disclosed are suggested in the applied prior art.

Applicant traverses the assertion in the Official Action that Kadambi et al. discloses disabling learning by the switching module of network addresses for the data packets transferred by the identified one network switch port: the cited portion of col. 12, lines 4-7 on page 2 of the Official Action, actually is directed to performing learning and updating distributed routing tables to avoid the necessity for re-learning:

> L2 self-initiated learning is achieved by deciphering the source address of a user at a given ingress port 24 utilizing the packet's associated address. Once the identity of the user at the ingress port 24 is determined, the ARL/L3 tables 21a are updated to reflect the user identification. The ARL/L3 tables 21 of each other EPIC 20 and GPIC 30 are updated to reflect the newly acquired user identification in a synchronizing step, as will be discussed below. As a result, while the ingress of EPIC 20a may determine that a given user is at a given port 24a, the egress of EPIC 20b, whose table 21b has been updated with the user's identification at port 24a, can then provide information to the User [sic] at port 24a without re-learning which port the user was connected.
>
> (Col. 11, line 64 to col. 12, line 7) (emphasis added)

Hence, Kadambi et al. discloses that all of the other tables are updated (i.e., learned) in response to performing self-initiated learning from the packet received at the ingress port 24; hence, the updating facilitates the processing of a reply packet (B to A), where the the source information (A) of the original packet (A to B) is supplied to the table 24b, enabling the table 24b to determine the "destination" for the reply packet (B to A). However, the cited portion of

Kadambi et al. does not disclose or suggest disabling the learning of the source address (B) of the reply packet.

Further, as shown below, Kadambi et al. does not disclose the claimed disabling learning of network addresses for the data packets transferred by the identified network switch port, as claimed. Kadambi et al. explicitly discloses learning the source addresses for each received packet, including the initial packet and the reply packet:

> Concurrently, the source MAC address of the incoming packet is "learned", and therefore added to an ARL table within ARL/L3 table 21a. After the packet is received by the destination, an acknowledgement is sent by destination station B to source station A. Since the source MAC address of the incoming packet is learned by the appropriate table of B, the acknowledgement is appropriately sent to the port on which A is located. When the acknowledgement is received at port 24a, therefore, the ARL table learns the source MAC address of B from the acknowledgement packet.
>
> (Col. 18, lines 53-63)(emphasis added).

Kadambi et al. also teaches away from the claimed invention by performing learning operations for layer three switching on packets output to and and from a router:

> By reading the IP address of the destination, SOC 10 is able to target the packet to an appropriate router interface which is consistent with the destination IP address. . . . The destination MAC address, therefore, is the router MAC address for B. The router MAC address is learned through the assistance of CPU 52, which uses an ARP (address resolution protocol) request to request the destination MAC address for the router for B, based upon the IP address of B. Through the use of the IP address, therefore, SOC 10 can learn the MAC address.
>
> (Col. 19, line 25-39) (emphasis added).

Kadambi et al. also explicitly discloses use of a default router table:

> It should be noted that ARL/L3 tables 21/31 include an IP default router table which is utilized for an IP longest prefix cache lookup when the packet is identified as an IP

> packet, and also includes an IPX default router table which is utilized when the packet header identifies the packet as an IPX packet.
>
> (Col. 26, lines 48-53).

As apparent from the foregoing, Kadambi et al. neither discloses nor suggests <u>disabling</u> learning of network addresses for the data packets transferred by the identified one network switch port that transfers data packets between the integrated network switch and the router. Rather, Kadambi et al. adds an IP default router table, and hence additional memory requirements, to accomodate the numerous IP addresses encountered from the traffic via the router. Moreover, Kadambi et al. does not provide any disclosure that disabling of learning is available as an option.

Hence, independent claims 1 and 9 are patentable over Kadambi et al.

Applicant further traverses the rejection of claims 4, 7-8, and 11: the cited portion of col. 17, lines 37-47 does <u>not</u> indicate that non-learning mode is an available state; rather, cited portion describes available spanning tree states. The available states spanning tree states are: Disable (no packets accepted by the port); Blocking/Listening (no packets except BPDUs are accepted by the port); <u>Learning</u> (packets are accepted for learning but are not forwarded); and Forwarding (packets accepted for <u>both</u> learning and forwarding). Hence, the interpretation of Kadambi et al. by the Official Action is inconsistent with the explicit disclosure thereof.

In fact, Kadambi et al. makes no reference whatsoever to non-learning.

Further, the claimed "disabling learning" does not read on disabling a network switch port from accepting any packets, as suggested by the Official Action: the specification and claims specify that packets can be switched even though learning is disabled (see, e.g., Fig. 4 at

steps 52, 58, and 60 and page 6, lines 1-10 of the specification). Hence, "claims are not to be read in a vacuum, and limitations therein are to be interpreted in light of the specification in giving them their 'broadest reasonable interpretation.'" MPEP § 2111.01 at 2100-37 (Rev. 1, Feb. 2000) (quoting In re Marosi, 218 USPQ 289, 292 (Fed. Cir. 1983)(emphasis in original)).

For these and other reasons, the §102 rejection should be withdrawn.

To the extent necessary, Applicant petitions for an extension of time under 37 C.F.R. 1.136. Please charge any shortage in fees due in connection with the filing of this paper, including any missing or insufficient fees under 37 C.F.R. 1.17(a), to Deposit Account No. 50-0687, under Order No. 95-308, and please credit any excess fees to such deposit account.

Respectfully submitted,

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MARKED-UP VERSION OF AMENDMENTS

4. (AMENDED) The method of claim 3, wherein the disabling step includes permanently setting the one network switch port into a nonlearning mode by a host controller, based on the identifying step.

Replacement paragraph at page 5, line 18:

Figure 3 [4] is a diagram illustrating the disabling of learning by the switching module 25 of data packets transferred between the router interface port 20d and the router 16 according to an embodiment of the present invention. As described above, the host CPU 26 is configured for controlling the network switch 12: each of the network switch ports 20 has a corresponding learning bit which, when set, causes the switch fabric 25 to learn layer 2 and layer 3 addresses of the data packets received by the corresponding switch port 20. Hence, the host CPU 26 begins in step 40 by setting the learning bit on all the ports to "1". The host CPU 26 then identifies the router interface port 20d that is configured for sending and receiving data packets to the router 16 in step 42. The host CPU 26 then disables (i.e., it resets) the learning bit to zero on the router interface port in step 44. After the learning bit has been disabled on the router interface port 20d, the network switch 12 is ready to begin switching data packets.